

Salt and Nutrient Management Plans (SNMPs)

California Regional Water Quality Control Board (R7)

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Topics

- Basin Plan
 - Water quality standards
 - Beneficial uses
 - Water quality objectives
 - Applicable policies
- Basin Plan amendment process
- Critical issues



Basin Plan

- Master water quality control plan
- Identifies waters of Basin
- Establishes Water Quality Standards
 - Beneficial uses of waters
 - Water quality objectives & policies to protect uses
- Establishes an implementation plan
 - Timelines, mandates for action, etc.
- Sets monitoring and surveillance program
- Includes State Board policies



SNMP for Coachella Valley

- Whitewater Hydrologic Unit
- Beneficial uses
 - Municipal
 - Industrial
 - Agricultural supply



MUN Water Quality Objectives

■ Numeric

- Maximum contaminant levels of Title 22, CCR

22 CCR, Primary MCLs

Nitrogen (mg/L)	10
Nitrate (mg/L)	45
Selenium (mg/L)	0.05

22 CCR, Secondary MCLs

Constituent	Recommended	Upper	Short-term
TDS (mg/L)	500	1000	1500
EC (uS/cm)	900	1600	2200
Chloride (mg/L)	250	500	600
Sulfate (mg/L)	250	500	600



Board's Role

- Only Regional Board and State Board can amend Basin Plan
- SNMP requires Basin Plan amendment
 - Requires your approval
 - One of the most important amendments for the Region
 - Direction on key components of SNMP, & policy
 - Ambient Water Quality & Assimilative capacity
 - Anti-degradation analysis
 - Implementation, including checks-and-balances, and feedback



Critical Issues

- Assimilative capacity
- Ambient water quality
- Methodology
- Compliance with Anti-degradation Policy
- Implementation of amendment



State Board Resolution 68-16

- Known as “Anti-degradation Policy”
 - Recognizes that quality of some waters is higher than quality required by policies
 - Requires State to maintain such high quality until it is demonstrated that change in quality:
 - Is to the maximum benefit of State
 - Will not unreasonably affect beneficial uses
 - Will not result in quality below that quality established by policies

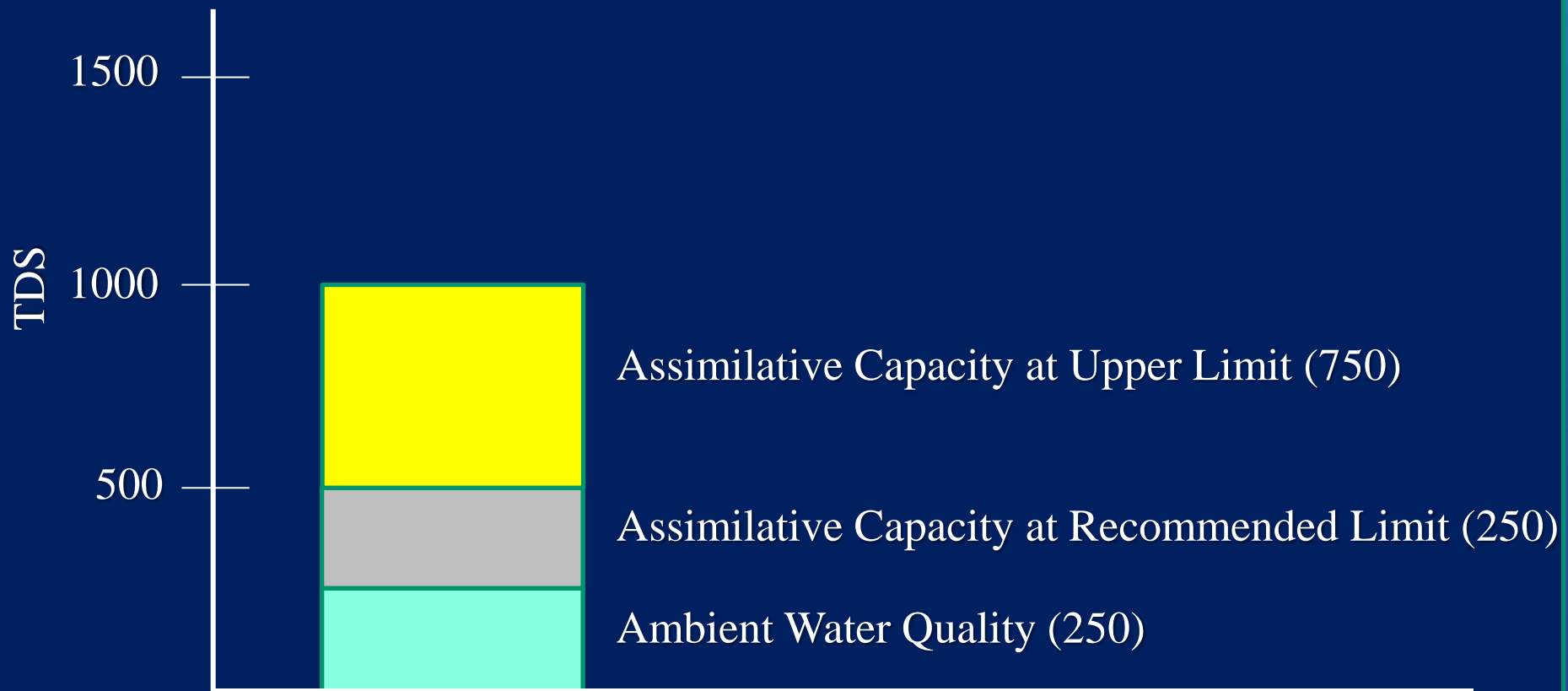


Example: Discharge of Waste

- Proposed discharge of domestic waste to evaporation/percolation ponds
 - TDS of proposed discharge = 900 mg/l
 - Depth to groundwater 100 ft
 - Discharge has potential to increase TDS in groundwater
 - TDS of areal groundwater = 250 mg/L
- Applicable standards: 22 CCR MCL
 - 500 mg/l, 1,000 mg/l, and 1,500 mg/l
- Anti-degradation analysis
 - What is reasonable amount of increase of TDS?

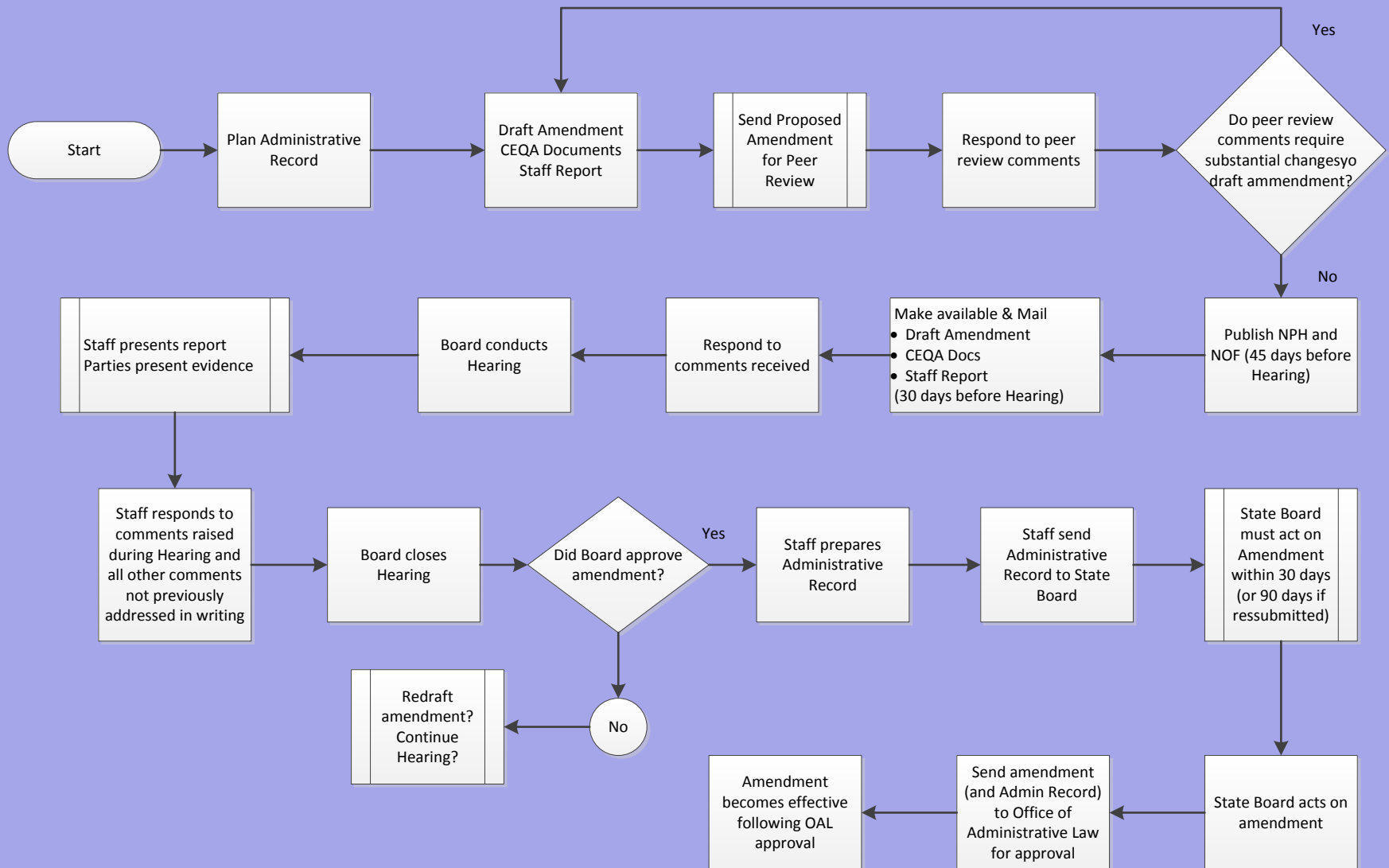


TDS Issues to consider





Road Ahead





Staff's Role

- Provide technical and regulatory oversight, guidance
 - Evaluate data, make recommendations as appropriate
- Provide Regional Board with verifiable data
 - Seek Regional Board direction/elevate issues as needed
- Regarding amendment
 - Responsible for Administrative Record
 - Prepare proposed amendment package
 - Responsible for technical aspects of amendment
 - We either prepare them or review them for adequacy when they prepared by other entity
 - Ensure scientific aspects are peer reviewed
 - Prepare and submit package for peer review, respond to comments



Amendment Documents

- Draft Amendment
- Draft Resolution
- CEQA Checklist and Discussion
- Staff Report with:
 - Technical aspects of amendment
 - Reasonable alternatives considered
 - Mitigation measures
 - Economic considerations
 - Anti-degradation analysis



Scientific Peer Review

- Typically UC academic experts
- Scientific basis
 - Hydrogeologic setting
 - Regulatory context
 - Special studies
 - Methodology, assumptions, calculations, etc.
- We don't send piecemeal work or work that we feel is not ready for peer review
- Questions/Comments become part of record

Questions/Comment?

Total Maximum Daily Load



Allowable
Pollution from
point sources
(includes
stormwater)

+



Allowable
Pollution from
nonpoint sources

+



Pollution from
Natural Sources
(wind, runoff, etc.)

+ MOS

Margin of
Safety
(uncertainty)

“Pollution budget” plan



Emerging Constituents of Concern

- Substances with real or perceived threat
- No health standard/standard is evolving
 - Nanoparticles
 - Pharmaceuticals
 - Personal care products
 - Endocrine disrupting compounds
 - Chemicals (including those in products and packaging)
- Environmental Council of State
 - State Water Board, USEPA, other States, NGOs
 - Working on identifying and characterizing threat
 - Making recommendations for regulation
 - Report available at:

http://www.ecos.org/section/ecoswire_attachments/

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Strategic goals

1. Develop regulatory strategy to protect municipal/domestic ground water basins
2. Support completion of Use Attainability Analyses and site specific objectives for the Region (where controls on point and non-point sources of pollution are not sufficient to meet REC I uses)
3. Increase use of recycled wastewater by 30%
4. Attain water quality standards of impaired surface waters
5. Ensure that Water Board staff members have the knowledge and skills needed to effectively and efficiently carry out the Water Board's mission